# SUBSTITUTE DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Injectible Polysaccharide-Cell ( the specification of which (check			
	is attached	hereto	
		on <u>April 30, 1993</u> ion Serial No. <u>08/056,140</u>	
	and was ar	nended on:(if applicable)	<del></del>
I hereby state that I have claims, as amended by any ame		ntents of the above-identified spec	ification, including
	to disclose information which is m of Federal Regulations, § 1.56(a).	naterial to the examination of this	application in
atent or inventor's certificate l		nited States Code, § 119 of any for d below any foreign application fo nich priority is claimed.	
Prior Foreign Application(s)			Priority <u>Claimed</u>
(Number)	(Country)	(Day/Month/Year Filed)	
(Number)	(Country)	(Day/Month/Year Filed)	
(Number)	(Country)	(Day/Month/Year Filed)	
below and, insofar as the subject application in the manner provi to disclose material information	et matter of each of the claims of t ded by the first paragraph of Title as defined in Title 37, Code of Fe	dode, § 120 of any United States application is not disclosed in the 35, United States Code, § 112, Inderal Regulations, § 1.56(a) which ational filing date of this applications.	he prior United Sta acknowledge the du occurred between
		( <b>F</b>	

(patented, pending, abandoned)

Date \_\_\_\_\_

As named inventor, I hereby appoint the following attorney(s) and agent to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Claudia R. Adkison	36,979
Charles T. Simmons	35,359
David W. Bradin	P37,783

Send Correspondence to:

Patrea L. Pabst, Esq.

Kilpatrick & Cody

1100 Peachtree Street, Suite 2800 Atlanta, Georgia 30309-4530

Direct telephone calls to:

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Patrea L. Pabst (404)815-6508, or John S. Pratt (404)815-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on inf rmation and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. Full name of sole or first inventor Linda Griffith-Cima Inventor's signature

28 Burlington Street, Lexington, Massachusetts 02173 Citizenship <u>United States</u>

Post Office Address Same as above

Full name of second joint inventor (if any) Anthony Atala

Inventor's signature Residence 14 LaGrange Street, Newton, Massachusetts 02167

Citizenship United States

Post Office Address Same as above

(patented, pending, abandoned)

As named inventor, I hereby appoint the following attorney(s) and agent to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

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24114	

Send Correspondence to:

Patrea L. Pabst, Esq.

Kilpatrick & Cody

1100 Peachtree Street, Suite 2800 Atlanta, Georgia 30309-4530

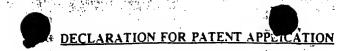
Direct telephone calls to:

T.

Patrea L. Pabst (404)815-6508, or

John S. Pratt (404)815-6367

Full name of sole r first inventor Charles A. Vacanti	
Inventor's signature Chale C. Valate	Date 2/13/94
Residence 5 Bushnell Drive, Lexington, Massachusetts 02173	
Citizenship United States	
Post Office Address Same as above	
Full name of second joint inventor (if any) Keith T. Paige	
Inventor's signature	Date
Residence 37 Perry Street, No. 1, Brookline, Massachusetts 02146	
Citizenship United States	
Post Office Address Same as above	



As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the or	iginal, first and sole	inventor (if only one name is subject matter which is claims	listed below), o	r an original, first and joins
invention antitlade		ACCHARIDE-CELL COMPOSIT		a parent is sought on the
the specification of which (ch	eck one)			
		is attached hereto		
		X was filed on April as application Serial No		
		and was amended on:		
			(if applicable	)
I hereby state that I claims, as amended by any a		inderstand the contents of the to above.	above-identified	specification, including the
I acknowledge the du accordance with Title 37, Coo		nation which is material to the ations, § 1.56(a).	examination of	this application in
patent or inventor's certificat	e listed below and h	nder Title 35, United States C ave also identified below any f application on which priority is	oreign applicati	
Prior Foreign Application(s)				Priority <u>Claimed</u>
(Number)	(Country)	(Day/Month	Year Filed)	
(Number)	(Country)	(Day/Month/	Year Filed)	
(Number)	(Country)	(Day/Month	Year Filed)	
below and, insofar as the sub application in the manner pro to disclose material informati	ject matter of each ovided by the first p on as defined in Tit	, United States Code, § 120 of of the claims of the application aragraph of Title 35, United S le 37, Code of Federal Regulat al or PCT international filing	is not disclosed tates Code, § 11 ions, § 1.56(a) v	I in the prior United States 12, I acknowledge the duty which occurred between the
(Application Serial No.)		(Filing Date)	(pate	Status ented, pending, abandoned)
(Application Serial No.)		(Filing Date)	<del>_</del>	Status

(patented, pending, abandoned)

"injectable Polysaccharic	,-rerr	COMPOSITIONS	•
By: Keith T. Paige et	•		
Filed: April 30,			
DESCRIPTION			



As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Claudia R. Adkison	P36,979
Charles T. Simmons	35,359

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1100 Peachtree Street, Suite 2800

Atlanta, Georgia 30309-4530

Direct telephone calls to:

Patrea L. Pabst (404)815-6508, or

John S. Pratt (404)815-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Keith T. Paige	
Inventor's signature	Date
Residence 37 Perry Street, No. 1, Brookline, Massachusetts	02146
Citizenship United States	
Post Office Address Same as above	
·	
Togoth D. Vocanti	
	•
Full name of second joint inventor (if any) Joseph P. Vacanti  Inventor's signature	•
	Date
Inventor's signature	Date
Inventor's signature	Date

Full name of sole or first inventor Charles A. Vacanti	
Inventor's signature	Date
Residence 5 Bushnell Drive, Lexington, Massachusetts 02173	
Citizenship United States	
Post Office Address Same as above	
Full name of second joint inventor (if any) Keith T. Paige	
Inventor's signature	Date 2/24/94
Residence 37 Perry Street, No. 1, Brookline, Massachusetts 02146	
Citizenship United States	
Post Office Address Same as above	



## UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

DOC DATE: 06/17/93

DOC DATE: 06/17/93

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

DATE: 08/25/93

TO:

NO6C

PATREA L. PABST, ESQ. KILPATRICK & CODY SUITE 2800, 1100 PEACHTREE ST. ATLANTA, GA 30309

> UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231 Ü

ASSIGNOR:

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PAIGE, KEITH T.

ASSIGNOR: VACANTI, JOSEPH P.

NUMBER OF PAGES 003 REEL/FRAME 6626/0675 RECORDATION DATE: 07/06/93

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

CHILDREN'S MEDICAL CENTER CORPORATION 55 SHATTUCK STREET BOSTON, MA 02115

SERIAL NUMBER 8-056140 FILING DATE 04/30/93 00/00/00 ISSUE DATE

PATENT NUMBER

EXAMINER/PARALEGAL ASSIGNMENT BRANCH

ASSIGNMENT/CERTIFICATION SERVICES DIVISION

70325H

# **ASSIGNMENT**

We, Keith T. Paige of 37 Perry Street, No. 1, Brookline, Massachusetts 02146 and Joseph P. Vacanti of 14 Woodside Road, Winchester, Massachusetts 01890. in consideration of Five Dollars and other valuable consideration paid to me by Children's Medical Center Corporation, a corporation of the Commonwealth of Massachusetts, having its principal place of business at 55 Shattuck Street, Boston, Massachusetts 02115, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Children's Medical Center Corporation, its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "Injectable Polysaccharide-Cell Compositions" described in an application filed April 30, 1993, in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 17% day of \_\_\_\_

State of Massachusetts) County of Suffock) ss.

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> Then personally appeared the above named Keith T. Paige and acknowledged the foregoing instrument to be his free act and deed, before me, this 17th day of \_\_\_ June, 1993.

Notary Public (communication express 4/96)

"Injectable Polysaccharide-C 11 Compositions" Fil d: April 30, 1993 **ASSIGNMENT** 

WITNESS my hand and seal this

State of Massachusetts)
County of Suffice.) SS.

Then personally appeared the above named Joseph P. Vacanti and acknowledged the foregoing instrument to be his free act and deed, before me, this 17 Hz \_ day of \_\_\_\_\_\_, 1993.

Notary Public Commission exprise 4/96)

JUL - 5 93



UNITED S.ATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

DATE: 04/21/94 TO:

PATREA L. PABST, ESQ. SUITE 2800 1100 PEACHTREE STREET ATLANTA, GA 30309-4530

> UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

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ASSIGNOR:

DOC DATE: 02/23/94

ATALA, ANTHONY

ASSIGNOR:

DOC DATE: 02/23/94

VACANTI, CHARLES A.

RECORDATION DATE: 03/21/94

NUMBER OF PAGES 004 REEL/FRAME 6909/0292

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

ĭIJ

CHILDREN'S MEDICAL CENTER CORPORATION 55 SHATTUCK STREET

BOSTON, MASSACHUSETTS 02115

SERIAL NUMBER PATENT NUMBER 8-056140

FILING DATE 04/30/93

ISSUE DATE 00/00/00

EXAMINER/PARALEGAL

ASSIGNMENT BRANCH

ASSIGNMENT/CERTIFICATION SERVICES DIVISION

MEPATRICILE DODY

Po3254

# 36 SHWH 6 0 6 9 HH

### **ASSIGNMENT**

We, Anthony Atala of 14 LaGrange Street, Newton, Massachusetts 02167, and Charles A. Vacanti of 5 Bushnell Drive, Lexington, 02173, in consideration of Five Dollars and other Massachusetts valuable consideration paid to us by Children's Medical Center Corporation, a corporation of the Commonwealth of Massachusetts having its principal place of business at 55 Shattuck Street, Boston, Massachusetts 02115, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Children's Medical Center Corporation, its successors and assigns, the entire interest for the United States of America and its territories and all foreign countries and jurisdictions including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or "INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS" improvement in described in U.S.S.N. 08/056,140 filed April 30, 1993 by Keith T. Paige and Joseph P. Vacanti in the United States Patent and Trademark Office, in the United States Patent and Trademark Office, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuation, continuation-in-part, renewals, reissue or other applications based in whole or in part And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters

Inventor: Keith T. Paige, et al. U.S.S.N. 08/056,140 Title: INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS ASSIGNMENT
Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.
WITNESS my hand and seal this $\frac{23}{4}$ day of $\frac{1984}{1994}$ .
Anthony Atala
Commonwealth of Massachusetts ) ss.
Then personally appeared the above named Anthony Atala and acknowledged the foregoing instrument to be his free act and deed, before me, this, day of, 1994.
Notary Public Ay commission 1/21/96
WITNESS my hand and seal this day of, 1994.
Charles A. Vacanti
Commonwealth of Massachusetts )ss.
Then personally appeared the above named Charles A. Vacanti and acknowledged the foregoing instrument to be his free act and deed, before me, this day of, 1994.
Notary Public



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

DATE: 04/18/94

TO:

PATREA L. PABST, ESQ. SUITE 2800 1100 PEACHTREE STREET ATLANTA, GA 30309-4530

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

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ASSIGNOR:

<u>.</u>=

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DOC DATE: 02/28/94

CIMA, LINDA GRIFFITH

RECORDATION DATE: 03/21/94 NUMBER OF PAGES 005 REEL/FRAME 6909/0296

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

77 MASSACHUSETTS AVENUE

CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER

8-056140

FILING DATE 04/30/93 ISSUE DATE 00/00/00

PATENT NUMBER

Lew

EXAMINER/PARALEGAI
ASSIGNMENT BRANCH

ASSIGNMENT/CERTIFICATION SERVICES DIVISION

MAY 1 1 1994
MERATIMORS COOV

Intered Computer 5/12/94

# EL GOOTHAND OF

## **ASSIGNMENT**

I, Linda Griffith Cima of 28 Burlington Street, Lexington, Massachusetts 02173, in consideration of Five Dollars and other valuable consideration paid to me by Massachusetts Institute of Technology, a corporation of Massachusetts having its principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Massachusetts Institute of Technology, its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "INJECTABLE POLYSACCHARIDE-CELL COMPOSITIONS" described in U.S.S.N. 08/056,140 filed April 30, 1993 by Keith T. Paige and Joseph M. Vacanti in the United States Patent and Trademark Office, herewith in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And I agree, for myself and my executor and administrator, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or

Inventor: Keith T. Paige, et al.
U.S.S.N. 08/056,140

**ASSIGNMENT** 

applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this  $\frac{28}{1994}$  day of  $\frac{7}{1994}$ ,

LINDA-GRIFFITH CIMA

County of Massachusetts )ss.

Then personally appeared the above named Linda Griffith Cima and acknowledged the foregoing instrument to be free act and deed, before me, this  $\frac{2|x|^{2}}{2}$  day of  $\frac{2|x|^{2}}{2}$ , 1994

Construction of the Constr

Notary Public

Inventor: Keith T. Paige U.S.S.N. 08/056,140 Title: INJECTABLE POLYSA ASSIGNMENT		POSITIONS	
Patent as shall be grante based thereon to said cor			
WITNESS my hand and	seal this	day of	
	Anthony	Atala	
Commonwealth of Massachus County of	etts ) <sub>ss</sub> .		
Then personally appeach acknowledged the foregoing before me, this	g instrument to be	his free act and de	

WITNESS my hand and seal this 21994.

Commonwealth of Massachusetts )ss. County of Suffeld

Then personally appeared the above named Charles A. Vacanti and acknowledged the foregoing instrument to be his free act and deed, before me, this day of the day of 1994.

MAR 21 94

Notary Public

Cours exp 9-4-95